

I claim:

1. A disc saw felling head for harvesting trees and simultaneously removing stumps comprising:

a rotating member having a generally vertical axis of rotation when cutting a standing tree, the rotating member including:

5 an upper disc saw blade, having teeth distributed around an outer circumference of the blade to define an upper cutting width for severing a tree from a stump when the disc saw blade is rotated and advanced generally horizontally through the tree; and

10 a lower stump reducing drum blade having a reducing width which presents a generally circular cutting swath to a stump in a direction perpendicular to the axis of the component and which extends downwardly from the disc saw blade so as to reduce the height of the stump left after the disc saw blade has severed the tree by advancing the drum blade generally horizontally through the stump;

15 a support for the rotating member; and

at least one motor coupled to the rotating member capable of rotating both blades of the rotating member.

2. The apparatus of claim 1, wherein the reducing width of the drum blade extends downwardly from the disc saw blade by a distance greater than the cutting width of the disc saw blade, and the reducing width mulches the stump over substantially its entire width.

3. The apparatus of claim 2, wherein the reducing width of the drum blade extends downwardly from the disc saw blade to at or near ground level.

4. The apparatus of claim 1, wherein the drum blade is coaxial with the disc saw blade.

5. The apparatus of claim 1, wherein the drum blade is rotated by the same motor as the disc blade.

6. The apparatus of claim 1, wherein the disc saw blade is significantly larger in radius than the drum blade.

7. The apparatus of claim 6, wherein the disc saw blade is approximately 10 or more inches larger in radius than the drum blade.

8. The apparatus of claim 1, wherein the drum blade reduces the height of the stump down to at or near ground level in a single pass.

9. A method of harvesting trees comprising the steps of: simultaneously rotating and advancing a disc saw blade through a standing tree so as to produce a kerf in the tree that severs the tree from a stump of the tree; after initial severance of the tree and with the disc saw blade over the stump, simultaneously rotating and advancing a  
5 stump grinder drum blade through the stump in a direction generally perpendicular to the axis of a trunk of the standing tree to reduce the height of the stump, the stump grinder drum blade having an axis of rotation which is generally parallel to the tree trunk, being positioned below the disc saw blade and presenting a generally circular cutting swath to the stump as the drum blade is advanced through the stump in a  
10 direction which is generally perpendicular to the trunk of the tree.

10. The method of claim 9, further comprising the step of accumulating a plurality of cut trees on a butt plate of said head.

11. In a disc saw felling head having a frame, a butt plate for supporting the cut ends of trees, a disc saw blade below the butt plate having teeth radially outside of an outer edge of the butt plate and distributed around an outer circumference of the blade to define an upper cutting width for severing a standing tree from a stump when  
5 the disc saw blade is rotated and advanced generally horizontally through the tree and a motor for rotating the disc saw blade, the improvement wherein the head also comprises a stump grinder drum blade which is rotatably driven by the head and is advanced through the stump in a generally horizontal direction to reduce the height of the stump, the stump grinder drum blade having an axis of rotation which is generally  
10 parallel to a trunk of the tree, being positioned below the disc saw blade and presenting a generally circular cutting swath to the stump as the drum blade is rotated and advanced through the stump in a generally horizontal direction.

12. The apparatus of claim 11, wherein the reducing width of the drum blade extends downwardly from the disc saw blade by a distance greater than the cutting width of the disc saw blade, and the reducing width mulches the stump over substantially its entire width.

13. The apparatus of claim 12, wherein the reducing width of the drum blade extends downwardly from the disc saw blade to at or near ground level.

14. The apparatus of claim 11, wherein the drum blade is coaxial with the disc saw blade.

15. The apparatus of claim 11, wherein the drum blade is rotated by the same motor as the disc blade.

16. The apparatus of claim 11, wherein the disc saw blade is significantly larger in radius than the drum blade.

17. The apparatus of claim 16, wherein the disc saw blade is approximately 10 or more inches larger in radius than the drum blade.

18. The apparatus of claim 11, wherein the drum blade reduces the height of the stump down to at or near ground level in a single pass.